



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,714	12/01/2003	Pao Chuan Hung	Y3P3008-PB920232	8928
46962	7590	03/21/2005	EXAMINER	
PAO CHUAN HUNG 235 CHUNG-HO BOX 8-24 TAIPEI HSIEN, 235 TAIWAN			SAWHNEY, HARGOBIND S	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 03/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/730,714

Applicant(s)

HUNG, PAO CHUAN

Examiner

Hargobind S. Sawhney

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-13 are objected to because of the following informalities:

Claim 1, line 1, "lamp used to a wheel" is confusing. It should be rephrased as -- lamp attached to a wheel --.

Appropriate correction is required.

Claim 1 of the instant application has been examined interpreting the limitation "lamp used to a wheel" as -- lamp attached to a wheel --.

Claim 4, line 2, "the control circuit" should be rephrased as -- a control circuit -- as the recitation lacks sufficient antecedent basis.

Claim 10, line 2, " the light emitting element " should be rephrased as -- the light sensing element -- to reflect the limitation recited in line 2 of the base Claim 8.

Claims 2-13 are objected because of their dependency on the objected base Claim 1.

Claim 10 of the instant application has been examined considering the limitation " the light emitting element " as -- the light-sensing element --.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Galbert (US Patent No.: 4,176,390).

Regarding Claim 1, Galbert ('390) discloses a lighting structure of an alarm lamp 10 attached to a wheel 11 (Figure 1), the alarm lamp 10 having:

- a body 17 (Figure 4, column 3, lines 38-40); a battery 37 positioned in the body 17 (Figure 4, column 3, lines 55 and 56); one end of the body 17 coupled to a lighting element guide 50 (Figure 4, column 4, lines 52 and 64-66) guiding light needed for a safety alarm effect; a lighting element 34 positioned in the light guide 50 (Figure 4, column 3, lines 48-50 and column 4, lines 52-56); an eccentric force from the rotating wheel 11 causing the battery 37 to supply power to the lighting element 34 (Figure 4, abstract, column 4, lines 17-24);
- the body 17 including a lower cover 35 with a conductive sheet – the inner surface of the lower cover 35 - (Figure 4, abstract, column 3, lines 62-66);

- a spring 36 supported on one end - lower end 35-, and the battery 37 resisting against the spring 36 (Figure 4, column 3, lines 51-62); and
- a control circuit – including a biasing spring 41 acting as a switch controlling electrical contact and separation of the battery 37- connected to the light-emitting element 34 (Figure 4, abstract, column 4, lines 5-13; and column 6, lines 20-30).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galbert (US Patent No.: 4,176,390) in view of Szaniszio (US Patent No.: 5,803,574).

Regarding claims 5 and 6, Galbert ('390) discloses a lighting structure of an alarm lamp 10 attached to a wheel 11 (Figure 1), the alarm lamp 10 including an electrical control circuit including a battery and a contact spring switch actuating a light emitting element. However, Galbert ('390) does not specifically teach the electrical control circuit including an oscillating circuit and light sensing circuit.

On the other hand, Szaniszio ('574) discloses a safety light 1 and 1' mountable on a bicycle wheel (Figure 1), the safety light 1 or 1' comprising an electrical control circuit 21 including an oscillating circuit providing oscillating signals 20, and a light sensing circuit 25 generating light detector signal 24 (Figures 1 and 2, column 3, lines 36- 44, and column 4, lines 10-19).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the alarm light of Galbert ('390) by providing the oscillating and light sensing circuits as taught by Szaniszio ('574) for the benefits and advantages of providing a safety light automatically operable during low-light condition in an energy saving manner, and having high attention value for safety.

Regarding claims 7, 8 and 10, Galbert ('390) in view of Szaniszio ('574) discloses the alarm lamp further comprising:

- the oscillating circuit, included in the control circuit 21, causing the light emitting element flash (Szaniszio, Figures 1 and 2, column 1, lines 51 and 52; and column 4, lines 10-19);
- the light sensing circuit 25 including a light sensing element extinguishing the light emitting element with the control signal 22 (Szaniszio, Figures 1 and 2, column 1, lines 51-58; and column 3, lines 40-44);
- a light sensing element, included in the light sensing circuit 25, being a light sensitive resistor (Szaniszio, Figures 1 and 2, column 3, lines 58-61).

Regarding Claim 9, Galbert ('390) in view of Szaniszio ('574) discloses the alarm lamp further comprising a light sensing element included in the light sensing circuit 25,

Art Unit: 2875

and the light sensing element being a photodiode 28 (Szaniszio, Figures 1 and 2, column 4, lines 25-29).

However, neither combined nor individual teaching of Galbert ('390) and Szaniszio ('574) specifically discloses the light-sensing element being a photoelectric transistor. On the other hand, in the absence of criticality of photoelectric transistor, the photodiodes are considered functionally equivalent to the photoelectric transistor.

It would be have been obvious to one of ordinary skill in the art at the time of the invention to realize a photoelectric transistor being equivalent to a photodiode for the claimed function, and modify the alarm lamp by providing the photoelectric transistor for the benefits of energy saving resulting from automatic actuation of the light emitting device during low-light periods.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Galbert (US Patent No.: 4,176,390) in view of Yee (US Patent No.: 5,412,548).

Galbert ('390) discloses a lighting structure of an alarm lamp attached to a wheel, and the alarm lamp further including a light emitting element positioned in a light guide element. However, Galbert ('390) does not specifically teach the light guide element further including surface irregularities such as recesses or microprisms.

On the other hand, Yee ('548) discloses a lighting device L4 (Figurer 15) including a light guide element 106 with haired surface (Figure 15, column 9, lines 41-45).

It would be have been obvious to one of ordinary skill in the art at the time of the invention to modify the alarm light of Galbert ('390) by providing the light guide element

Art Unit: 2875

as taught by Yee ('548) for the benefits and advantages of widely diffused and dispersed light of substantially uniform intensity.

***Allowable Subject Matter***

7. Claims 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record, including Galbert ('390) and Szaniszio ('574), does not show or suggest the applicant's invention as claimed. Specifically, the prior art of record does not disclose an alarm lamp combining:

- a light guide element formed with a hook installed at a steel wire head of a wheel as recited in Claim 12; and
- one end of the body of the alarm lamp body installed in a sleeve having movable stop sheets as recited in Claim 12.

The above-indicated combination, including a light guide element including formed with a hook installed at a steel wire head of a wheel, makes this invention unique.

Therefore Claim 12 is objected over the prior art.

Claim 13 is necessarily objected because of their dependency on the objected base Claim 12.



***Conclusion***

8. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohkohdo et al. (U.S. Patent No. 6,530,683 B1), McGhee (U.S. Patent No. 5,984,487), Ford et al. (U.S. Patent No. 5,980,063), Reynolds (U.S. Patent No. 5,903,224), Lee (U.S. Patent No. 5,800,039), Chein (U.S. Patent No. 5,683,164), Larsen (U.S. Patent No. 4,814,951), Modurkay (U.S. Patent No. 4,135,229) and Rush (US Patent No.: 3,890,497)

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hargobind S Sawhney whose telephone number is 571 272 2380. The examiner can normally be reached on 6:15 - 2:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571 272 2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

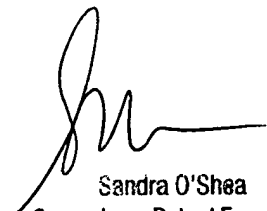
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2875

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HSS  
3/14/2005



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800